

Student and Registered Nursing Staff's Perceptions of 12-Hour Clinical Rotations in an Undergraduate Baccalaureate Nursing Program

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Background

- With today's increase in student enrollment in baccalaureate education it has become more difficult to secure quality clinical placements with optimal learning experiences and clinical faculty
- Some clinical agencies are only able to offer 12 hour clinical shift rotations for student experiences
- There are a limited number of studies that have been conducted on the use of 12 hour clinical shift rotations with nursing students, with little evidence to support the use of this clinical scheduling strategy

Purpose of Study

- The purpose of this study is to evaluate the student and registered nursing staff's perceptions of whether the 12-hour clinical shift rotation enhances the student's clinical learning ability, allows for better continuity of care for their assigned patients and families, and facilitates the ability to correlate theory to nursing practice.

Research Questions

1. Do nursing students perceive that a 12-hour clinical rotation is beneficial to their clinical learning?
2. Do nursing staff perceive that working with nursing students during a 12-hour clinical experience is beneficial?

Research Questions (con't.)

3. Do nursing students feel that the 12-hour clinical rotation allows for a better opportunity for continuity of care and learning for their assigned patients and families?
4. What are the advantages and disadvantages of a 12-hour clinical rotation perceived by nursing students and staff?

Methodology

- A mixed method descriptive design was used to conduct the study, incorporating both qualitative and quantitative method
- IRB approval obtained from Villanova University and Clinical Site Facility

Research Instrument and Method of Data Collection

- Questionnaire*
 - Separate questionnaire for RNs and Students
 - Likert Scale and Open-ended questions
 - Fall 2010 with 28 subjects
 - Cronbach's Alpha Student Questionnaire = .82
 - Cronbach's Alpha Nurse Questionnaire = .93
 - Spring 2011 with 38 subjects
 - Cronbach's Alpha Student Questionnaire = .88
- Focus groups
 - Three student focus groups held on campus
 - Four open-ended questions asked

For the students questionnaires, additional data was collected in Spring 2011 and was added to the original data from Fall 2010.

*Questionnaire adapted with permission from Rossen, B. E. and Fegan, M. A. (2009)

Sample Questions on Student Questionnaire

Using the Likert Scale, please respond to the following statements below based on your perception of the 12-hour clinical shift rotation in which you participated:

1. The 12-hour clinical shift rotation enhanced my clinical learning experience.
2. I had a better opportunity for continuity of care for my assigned patients and families when I participated in the 12-hour clinical shift in comparison to the traditional 6 or 8 hour clinical day.
3. Participating in the 12-hour clinical shift allowed me a greater opportunity to evaluate the results of my nursing interventions in comparison to the traditional 6 or 8 hour clinical day.
4. I had more time to interact and discuss patient care issues with my instructor during the 12-hour clinical shift in comparison to the traditional 6 or 8 hour clinical day.

Sample Questions on Nurse Questionnaire

Using the Likert Scale, please respond to the following statements below based on your perception of the 12-hour clinical shift rotation in which you participated:

1. The 12-hour clinical shift allowed the students to develop a collaborative working relationship with the nursing staff.
2. The 12-hour clinical shift enhanced the students ability to correlate theoretical principles with clinical practice.
3. The students had more time to interact and discuss clinical issues with the nursing staff when participating in the 12-hour clinical shift in comparison to the traditional 6 or 8 hour clinical day.
4. The 12-hour clinical shift exposed the students to a wider spectrum of clinical situations.

Sample and Setting

- Sample
 - Junior level nursing students in the traditional and second degree BSN program who were assigned to 12-hour clinical rotations in an acute care setting
 - Registered nurses who worked with the students at the clinical agencies in an acute care ICU setting
- Setting
 - Two acute care clinical agencies in the greater Philadelphia area
 - Focus groups were conducted on campus

Sample Description

- Students
 - Number of students in 12-hour rotations
 - Fall 2010 = 47
 - 45 females, 2 male
 - Age range 20-41
 - Spring 2011 = 28
 - 23 females, 5 males (4 international students)
 - Age range 20-27
 - Questionnaires
 - Total returned surveys N = 28 (Fall 2010 - 60% return)
 - Total returned surveys N = 10 (Spring 2011 - 36% return)
 - Focus group participants
 - Total focus groups
 - N = 3 groups
 - All females
 - Age 20 - 41

Sample Description

- Staff RNs
 - Number of RNs who worked with students = 15
 - Total returned questionnaires
 - N = 8 (53 % return)
 - Demographics
 - All females
 - Age range 48 – 59
 - Education level: majority had an associate or bachelor's degree
 - Mean years of work experience = 29.37
 - Mean years in specialty = 27.62

Statistical Analyses

- Cronbach's Alpha using SPSS
- Descriptive statistics using SPSS
 - Mean
 - Range
 - Standard deviation
- Reviewed open-ended questions on questionnaires and focus group transcripts for common themes

Findings from Questionnaire

Student Responses

(on Likert Scale: 5 = strongly agree, 1 = strongly disagree)

		<u>Fall 2010</u> (n = 28)	<u>Spring 2011</u> (n = 38)
1.	The 12 hour clinical enhanced learning.....	4.68	4.58
2.	Continuity of patient care.....	4.86	4.79
3.	Evaluate interventions.....	4.71	4.66
4.	Acceptance by staff.....	4.04	3.94
5.	Acceptance by staff facilitated learning.....	4.43	4.39
6.	Enhanced collaborative relationship with staff....	4.57	4.42
7.	Enhanced ability to correlate theory to practice...	4.39	4.34
8.	Increased time with instructor.....	4.61	4.50
9.	Increased exposure to clinical situations.....	4.57	4.55

For the students questionnaires, additional data was collected in Spring 2011 and was added to the original data from Fall 2010.

Findings from Questionnaire

Nurse Responses

(on Likert Scale: 5 = strongly agree, 1 = strongly disagree)

1. The 12 hour clinical enhanced learning..... 4.63
2. Continuity of patient care..... 4.63
3. Evaluate interventions..... 4.63
4. Acceptance by staff facilitated learning..... 5.00
5. Enhanced collaborative relationship with staff..... 4.88
6. Enhanced ability to correlate theory to practice.... 4.75
7. Increased time with nursing staff..... 4.75
8. Increased exposure to clinical situations..... 4.88

Student's Responses Focus Groups and Open-Ended Questions

Themes:

- **Enhanced learning**

- More observations/real life experiences/ability to apply
- Enhanced learning from nurses, clinical faculty, physicians and respiratory
- Mid-conference during the day
- “Got to do med-pass several times throughout the day.”
- Able to apply classroom knowledge during downtime
- “More access to clinical instructor, they reviewed things that couldn't be reviewed on shorter day”
- Learning not fragmented, bigger picture
- “I just loved it, I learned so much.”
- More time to study nursing problems
- Able to evaluate patients

Student's Responses Focus Groups and Open-Ended Questions

Themes:

- **Communication**

- Rapport with patient, family, nurses and physicians enhanced
- Increased relationship with patient
- Better treatment from staff nurses, relationship enhanced
- “Nurse was happy and excited I would be there all day.”
- “Felt respected by the nursing staff because we were there longer.”
- “Forced me to include the family in the plan of care, most families visit around 4 or 5 after their work day.”

Student's Responses Focus Groups and Open-Ended Questions

Themes:

- **Collaboration**

- More opportunity to interact with interdisciplinary team
- Better treatment from staff nurses, relationship enhanced
- Felt part of the team
- Got to work with one nurse for the entire day
- “Encouraged teamwork amongst students to coordinate care and lunch breaks.”

Student's Responses Focus Groups and Open-Ended Questions

Themes:

- **Continuity of Care**

- More continuity of care (stated by multiple students)
- “.....facilitates a more fluid day”
- Ability to do multiple assessments and documentation, able to notice differences and improvements throughout the day
- Had more interactions with patients and families
- Could follow the course of care of the patient for a longer amount of time
- One of the main advantages of the 12-hour shift is continuity of care...you are able to see the patient through the day.”
- “I was able to play a role in the continuity of care of my patients.”

Student's Responses Focus Groups and Open-Ended Questions

Other comments:

- “Able to observe, then do.”
- “Realistic view of nursing.”
- “All students should participate in one.”
- Could see the results of our interventions
- “I actually think having the 12-hour shift is an asset to the program and will help make more thorough and prepared students.”
- “I feel we had an advantage over those who did not have 12-hour clinical shifts.”
- Got to know the patient behind the disease

Student's Responses Focus Groups

Theme:

- **Disadvantages**

- Tired at the end of the shift
- “Long day for a college student.”
- “If paired with a nurse who was not pleasant, then it made for a long day.”
- “Really hard to find a disadvantage, I wish we had more days on the unit, because I loved it so much.”
- Too much time in between clinical days
- No down-time on clinical days
- If slow day or clinical was cancelled (snow days) it's like missing two days
- Time went fast, ↓ in days was hard, because it limited time on unit

RNs Responses Open-Ended Questions

Themes:

- **Enhanced time for teaching**
 - Not rushed
 - See students strengths and weaknesses
 - More experience/exposure/more time to teach student
 - Time management skills can be developed
 - Able to interact with students and more time to formulate plan of care

RNs Responses Open-Ended Questions

Themes:

- **Continuity of care**
 - Can see consequences of treatments and interventions
 - Continuity of care
- **Other comments:**
 - Exposure to a more realistic working situation

RNs Responses Open-Ended Questions

Theme:

- **Disadvantages**

- Fatigue
- “Primary nurse can get tired, it’s a long time to talk through your day.”
- Sometimes hard to keep up with work while also working with students, i. e. charting
- No disadvantages
- Sometimes depends on patient acuity, if not good, then experiences can vary

Discussion of Findings

- There were similar themes found between the students and nurses related to continuity of care
- Student responses supported the theme of enhanced learning, while nurse responses supported the theme of enhanced time for teaching
- For Fall 2010 the highest mean on the student questionnaire was 4.86 on the question related to continuity of care (with the added data from Spring 2011, this was still the highest mean at 4.79)
- For Fall 2010, the lowest score on the student questionnaire was 4.04 for the question related to staff acceptance (with the additional data from Spring 2011 this was still the lowest mean score at 3.94)
- Overall, the response from students and nurses was positive regarding 12-hour clinical shifts for student rotations

Implications for Nursing

- Education

- Provides support for alternate clinical learning experience
- Enables greater opportunity for creative teaching-learning strategies between students, nurses, and faculty in the clinical setting

- Practice


- Provides students with a more realistic practice environment
- Opportunity for enhanced collaborative relationships between healthcare team and students

- Research

- Replication of the study for more generalizability of results

Limitations

- Small sample size
 - Have added to original sample
- Single site study
- No content validity on the research questionnaires
- Unable to conduct staff nurse focus groups, due to scheduling

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